



LG&E Energy LLC
220 West Main Street (40202)
P.O. Box 32030
Louisville, Kentucky 40232

August 20, 2004

RECEIVED

AUG 20 2004

**PUBLIC SERVICE
COMMISSION**

Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40601

**RE: *AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF KENTUCKY UTILITIES COMPANY
FROM NOVEMBER 1, 2003 THROUGH APRIL 30, 2004
CASE NO. 2004-00213***

Dear Ms. O'Donnell:

Please find enclosed and accept for filing the original and five (5) copies of the Response of Kentucky Utilities Company to the Commission Staff's Interrogatories and Requests for Production of Documents dated August 6, 2004, in the above-reference matter.

Should you have any questions concerning the enclosed, please contact me at your convenience.

Sincerely,

Robert M. Conroy
Manager, Rates

Enclosures

cc: Parties of Record



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

AUG 20 2004

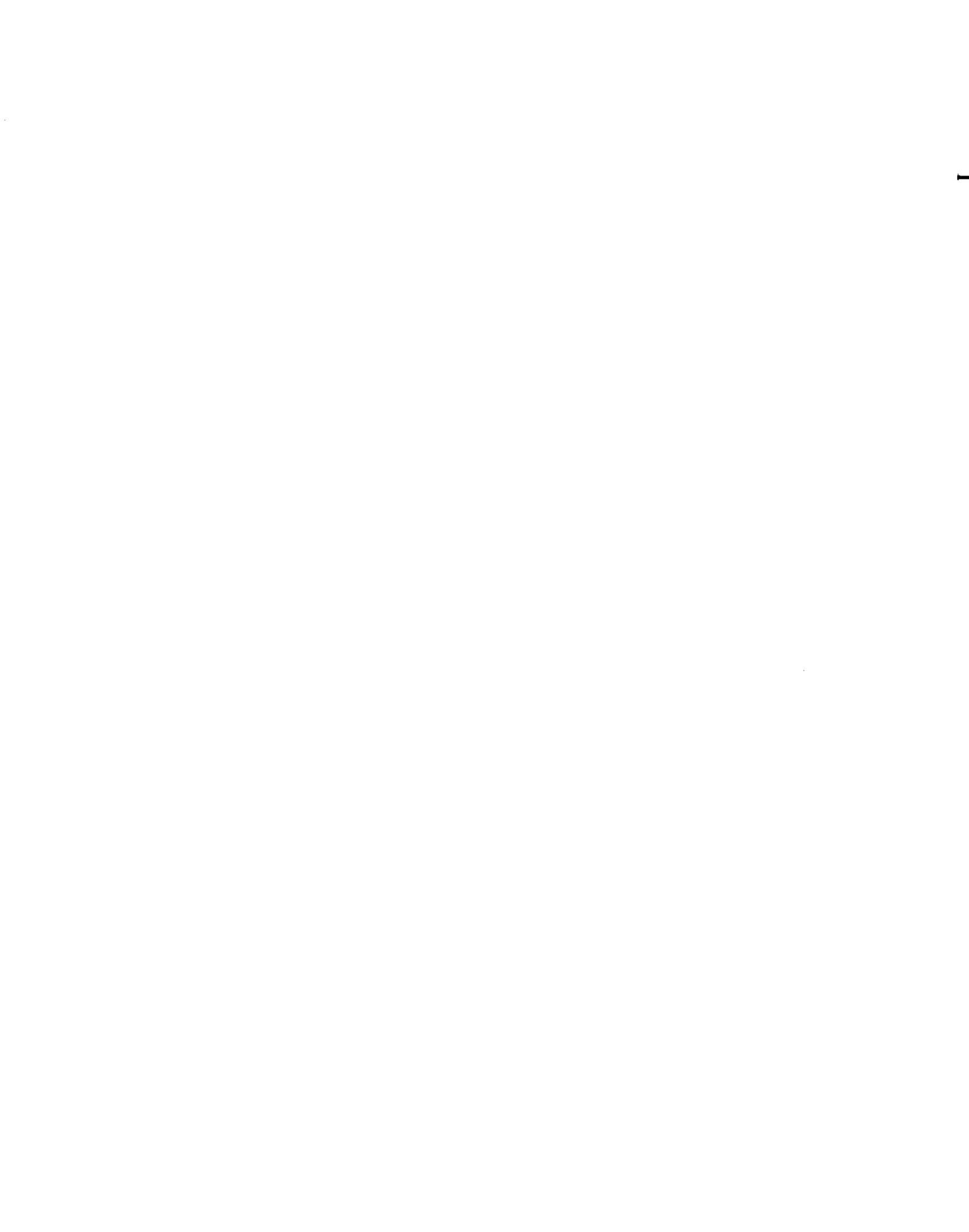
PUBLIC SERVICE
COMMISSION

In the Matter of:

AN EXAMINATION OF THE)
APPLICATION OF THE FUEL)
ADJUSTMENT CLAUSE OF KENTUCKY) CASE NO. 2004-00213
UTILITIES COMPANY FROM)
NOVEMBER 1, 2003 THROUGH APRIL)
30, 2004)

RESPONSE OF
KENTUCKY UTILITIES COMPANY
TO
COMMISSION STAFF'S INTERROGATORIES
AND REQUESTS FOR PRODUCTION OF DOCUMENTS
DATED AUGUST 6, 2004

FILED: AUGUST 20, 2004



KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's Interrogatories
and Requests for Production of Documents
Dated August 6, 2004**

Case No. 2004-00213

Question No. 1

Witness: John P. Malloy

- Q-1. Refer to Item 5 of the response to the Commission's June 23, 2004 Order.
- a. The response includes several references to tube leaks being the cause of outages at various units. Provide a comparison of the number and duration of outages due to tube leaks during the current six-month review period with the number and duration of outages due to tube leaks in each of the two previous review periods.
 - b. On page 4 of the response, outages are listed for E.W. Brown Unit CT 5 in January and February 2004 due to inadequate heating in the deluge building.
 - (1) Explain whether the heating problem has been corrected.
 - (2) If the heating problem has not been corrected, explain how and when KU plans to correct the problem.
 - c. On page 5 of the response, several hours of scheduled outages are listed to ready the unit for fuel oil commissioning.
 - (1) Explain whether the work was completed and, if so, if the unit is now being fueled by oil rather than by natural gas.
 - (2) Explain why the unit was converted from gas to oil. If the conversion was based on economics, explain why only one unit was converted.
- A-1.
- a. The table on the following page shows a comparison of outages due to boiler tube failures for the current and the past two review periods.

Boiler Tube Failure (BTF) Comparisons

Durations in Hrs:Min:Sec

Unit	Outage Type	Current Period Nov 03 - Apr 04		Prior Period May 03 - Oct 03		One Year Ago Nov 02 - Apr 03	
		# of Outages	Total Duration	# of Outages	Total Duration	# of Outages	Total Duration
BR1	FO	0	0:00:00	0	0:00:00	0	0:00:00
	MO	0	0:00:00	0	0:00:00	0	0:00:00
BR2	FO	0	0:00:00	0	0:00:00	6	469:28:00
	MO	1	53:35:00	1	29:55:00	0	0:00:00
BR3	FO	0	0:00:00	2	152:21:00	0	0:00:00
	MO	0	0:00:00	0	0:00:00	0	0:00:00
GH1	FO	3	134:17:00	2	58:41:00	3	102:01:00
	MO	0	0:00:00	2	81:45:00	0	0:00:00
GH2	FO	0	0:00:00	0	0:00:00	0	0:00:00
	MO	2	63:33:00	1	0:55:00	2	51:27:00
GH3	FO	3	99:08:00	3	141:19:00	2	66:55:00
	MO	0	0:00:00	1	52:21:00	5	134:33:00
GH4	FO	0	0:00:00	0	0:00:00	2	111:22:00
	MO	0	0:00:00	0	0:00:00	0	0:00:00
GR1	FO	0	0:00:00	0	0:00:00	1	21:24:00
	MO	0	0:00:00	0	0:00:00	4	216:20:00
GR2	FO	0	0:00:00	0	0:00:00	1	21:24:00
	MO	0	0:00:00	0	0:00:00	4	216:20:00
GR3	FO	2	120:34:00	1	47:21:00	2	44:47:00
	MO	1	20:55:00	0	0:00:00	1	82:52:00
GR4	FO	2	60:11:00	0	0:00:00	1	33:39:00
	MO	3	103:36:00	0	0:00:00	1	23:40:00
TY1	FO	0	0:00:00	0	0:00:00	0	0:00:00
	MO	0	0:00:00	0	0:00:00	0	0:00:00
TY2	FO	0	0:00:00	0	0:00:00	0	0:00:00
	MO	0	0:00:00	0	0:00:00	0	0:00:00
TY3	FO	0	0:00:00	0	0:00:00	0	0:00:00
	MO	0	0:00:00	1	41:15:00	0	0:00:00
SubTotal	FO	10	414:10:00	8	399:42:00	18	871:00:00
	MO	7	241:39:00	6	206:11:00	17	725:12:00
TOTALS	All BTF	17	655:49:00	14	605:53:00	35	1596:12:00

- b. The heating problem on E.W. Brown CT5 has been corrected.
- c. E.W. Brown CT6 was purchased and commissioned as a dual fuel system. However, CT6 has never run reliably on Fuel Oil. The work in December 2003 was conducted by ALSTOM as part of their responsibility following the GT24 Long Term Service Agreement. This was not a conversion but rather a modification to allow the unit to run reliably on fuel oil.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's Interrogatories
and Requests for Production of Documents
Dated August 6, 2004**

Case No. 2004-00213

Question No. 2

Witness: Mike Dotson

- Q-2. Refer to Item 6 of the response to the June 23, 2004 Order.
- a. On page 4 of the response, the contract with Argus Energy is shown as complete. Explain why only 34 percent of the contract coal requirement for 2003 was actually received.
 - b. There are 8 contracts that are due to expire during the remainder of 2004. Explain KU's plans for replacing the tonnage lost due to the expiration of these contracts.
- A-2.
- a. Contract KUF99679 was originally a Ghent compliance contract but due to changes in coal quality at the mine supplying this contract it was amended to allow Pen to ship a non-compliance coal to Ghent's high sulfur unit. Pen Coal filed for bankruptcy and this contract was assigned to Argus Energy, LLC on December 31, 2002 as part of Argus Energy's purchase of certain assets of Pen Coal. The contract was allowed to expire at the end of 2003 because current high sulfur coal purchases were at lower prices at that time.
 - b. There are two term contracts (Massey Coal KUF-02850 and Consol Energy KUF-00731) and several synfuel coal contracts scheduled to expire either during or at the end of 2004. The synfuel coal contracts are coal conversion agreements whereby KU agrees to purchase synfuel coal at a price discount in lieu of untreated coal. (Synfuel is crushed bituminous coal that has been chemically altered to comply with requirements of the Internal Revenue Code; synfuel has burn characteristics consistent with non-treated bituminous coal.) Shipments under the synfuel coal agreements reduce the volume commitment under the corresponding non-synfuel coal contract.

Kentucky Utilities Company issued multiple written coal solicitations in March and April 2004 for both high sulfur and compliance coal. Purchases will be made from the bids received in response to the written solicitation and unsolicited offers received during the year. The Company is currently negotiating for replacement tonnage for contracts expiring during 2004.



KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's Interrogatories
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Case No. 2004-00213

Question No. 3

Witness: John P. Malloy

- Q-3. Refer to Item 7 of the response to the June 23, 2004 Order. In the response, it is noted that several of the utilities in the price comparison group are able to utilize greater amounts of lower cost compliance coal from the Powder River Basin ("PRB") than can be utilized by KU. The response further states, "KU's ability to utilize PRB coal is limited due to operational constraints at its generating facilities."
- a. Provide a narrative description of the operational restraints referenced in the response.
 - b. Explain whether KU has conducted a cost/benefit study or similar analysis of the feasibility of making the necessary changes to alleviate these operational restraints. If such a study has been conducted, provide the results of the study.
- A-3. a. The prolonged use of PRB creates many issues for KU's generating stations. Some specific issues at Ghent requiring modification and increased investment include:
- Coal conveying system capacity
 - Ash handling systems modifications
 - Particulate emission control improvement
 - Capacity of the draft system to provide for the drying of the air
 - Increased mill maintenance

KU has operated Ghent 3 and Ghent 4 on a PRB / Eastern Bituminous coal blend (approximately 50% by volume or 30%/70% heat input) since 2001 and has learned that commitment to PRB for the Station would require:

- Increased Electrostatic Precipitator (ESP) Maintenance
ESP operation requires regular outages for cleaning to maintain proper ESP performance. The present blend rate requires this on a 6

month cycle. It is anticipated the cleaning cycle frequency will shorten to at least once per quarter with 100% PRB operation.

- Pulverizer throughput Capacity and Safety Issues
Spare pulverizer capacity has been consumed by the blending of PRB and compliance coal. The Company has not successfully improved pulverizer throughput with PRB. A 30% improvement is required to achieve full load.

- Fuel Handling
PRB is very difficult to handle when wet. PRB coal has higher moisture content, tends to be smaller in particle size and is stickier than bituminous coals. Transfer points and coal chutes must be re-designed to cope with handling issues associated with PRB.

The conveying system at Ghent Station is prone to chute plugging with the bituminous coals. The PRB exacerbates all of the system's short comings. Additionally, PRB dries very slowly in a stockpile.

- Dust Control
PRB is very prone to dusting when it is dry. The Station will require some form of dust control.
- Boiler Modifications
PRB changes boiler performance requiring significant modifications. These include additional super heater heating surface, economizer replacement and likely a material change in the reheat section.

- b. The Company is currently evaluating the increased use of PRB coal and the results will be included as part of an overall SO₂ compliance report.